human, or progeny of said multipotent stem cells, wherein said multipotent stem cells are self renewing, form non-adherent clusters, express nestin, and can differentiate into neuronal and mesodermal cell types, said method comprising the steps of:

(a) providing epithelial tissue from said human;

(b) culturing said epithelial tissue under conditions in which multipotent stem cells proliferate and in which at least 25% of the cells that are not multipotent stem cells die or attach to the culture substrate; and

(c) continuing culture step (b) until at least 30% of the cells are multipotent stem cells which are self renewing, form non-adherent clusters, express nestin, and can differentiate into neuronal and mesodermal cell types, or progeny of said multipotent stem cells.

19. (**Twice Amended**) A method of producing a population of at least ten cells, wherein at least 30% of the cells are multipotent stem cells substantially purified from epithelial tissue of a human, or progeny of said multipotent stem cells, wherein said multipotent stem cells are self renewing, form non-adherent clusters, express nestin, and can differentiate into neuronal and mesodermal cell types, said method comprising the steps of:

C1

(a) providing epithelial tissue from said human;

(b) culturing said epithelial tissue under conditions in which multipotent stem cells proliferate and in which at least 25% of the cells that are not multipotent stem cells die or attach to the culture substrate;

(c) separating said multipotent stem cells from said cells that attach to said culture substrate; and

(d) repeating steps (b) and (c) until at least 30% of the cells are multipotent stem cells which are self renewing, form non-adherent clusters, express nestin, and can differentiate into neuronal and mesodermal cell types, or progeny of said multipotent stem cells.

20. (**Reiterated**) The method of claim 19, wherein said population is at least one hundred cells.

43. (**Reiterated**) The method of claim 18 or 19, wherein said epithelial tissue is skin.

44. (**Reiterated**) The method of claim 18 or 19, wherein said epithelial tissue is tongue.

Please add the following new claims:

47. (**NEW**) A method of producing a population of at least ten cells, wherein at least 30% of the cells are multipotent stem cells substantially purified from skin or tongue tissue of a postnatal mammal, or progeny of said multipotent stem cells, wherein said multipotent stem cells are self renewing, form non-adherent clusters, express nestin, and can differentiate into neuronal and mesodermal cell types, said method comprising the steps of:

(a) providing skin or tongue tissue from said mammal;

(b) culturing said skin or tongue tissue under conditions in which multipotent stem cells proliferate and in which at least 25% of the cells that are not multipotent stem cells die or attach to the culture substrate; and

(c) continuing culture step (b) until at least 30% of the cells are multipotent stem cells which are self renewing, form non-adherent clusters, express nestin, and can differentiate into neuronal and mesodermal cell types, or progeny of said multipotent stem cells.

C2

48. (**NEW**) A method of producing a population of at least ten cells, wherein at least 30% of the cells are multipotent stem cells substantially purified from skin or tongue tissue of a postnatal mammal, or progeny of said multipotent stem cells, wherein said multipotent stem cells are self renewing, form non-adherent clusters, express nestin, and can differentiate into neuronal and mesodermal cell types, said method comprising the steps of:

(a) providing skin or tongue tissue from said mammal;

(b) culturing said skin or tongue tissue under conditions in which multipotent stem cells proliferate and in which at least 25% of the cells that are not multipotent stem cells die or attach to the culture substrate;

(c) separating said multipotent stem cells from said cells that attach to said culture substrate; and

(d) repeating steps (b) and (c) until at least 30% of the cells are multipotent stem cells which are self renewing, form non-adherent clusters, express nestin, and can differentiate into neuronal and mesodermal cell types, or progeny of said multipotent stem cells

C2 Cont

The amended claims are restated below to reflect changes from the last filing.

18. (**Twice Amended**) A method of producing a population of at least ten cells, wherein at least 30% of the cells are multipotent stem cells substantially purified from epithelial tissue of a ~~postnatal mammal~~ human, or progeny of said multipotent stem cells, wherein said multipotent stem cells are self renewing, form non-adherent clusters, express nestin, and can differentiate into neuronal and mesodermal cell types, said method comprising the steps of:

(a) providing epithelial tissue from said human ~~mammal~~;

(b) culturing said epithelial tissue under conditions in which multipotent stem cells proliferate and in which at least 25% of the cells that are not multipotent stem cells die or attach to the culture substrate; and

(c) continuing culture step (b) until at least 30% of the cells are multipotent stem cells which are self renewing, form non-adherent clusters, express nestin, and can differentiate into neuronal and mesodermal cell types, or progeny of said multipotent stem cells.

19. (**Twice Amended**) A method of producing a population of at least ten cells, wherein at least 30% of the cells are multipotent stem cells substantially purified from epithelial tissue of a ~~postnatal mammal~~ human, or progeny of said multipotent stem cells, wherein said multipotent stem cells are self renewing, form non-adherent clusters, express nestin, and can differentiate into neuronal and mesodermal cell types, said method comprising the steps of:

(a) providing epithelial tissue from said human ~~mammal~~;